

CLAIMS

Sub B2
1. An information sorting method comprising a step of acquiring, through a clustering module, a plurality of search results searched by a search service, a step of performing, through the clustering module, a clustering process on the search results, and outputting the clustering result from the clustering module.

2. An information sorting method according to claim 1, further comprising a step of converting, through a converter module, the search result searched by the search service into a format that is processed by the clustering module.

10 3. An information sorting method according to claim 2, wherein the converter module is arranged correspondingly to each of a plurality of search services when the clustering process is performed correspondingly to the plurality of search services.

15 4. An information sorting method according to claim 3, wherein a search process is performed using one search service selected from the plurality of search services and the clustering process is performed on the search result searched by the selected search service.

20 5. An information sorting method according to claim 3, wherein search processes are performed in parallel using at least two search services of the plurality of search services, respective search results are collected, and the clustering process is performed on the collected search results.

6. An information sorting method according to claim 3, wherein search processes are performed in parallel using at least two search services of the plurality of search services, and the clustering process is individually performed on the search results.

Sub A1
25 7. An information sorting method according to one of claims 1 through 6, wherein when the clustering process is performed on the search result, information to be

clustered is at least one of the title of a document, a URL address, an update date, and a file size of an individual search result.

8. An information sorting method according to claim 1, wherein the order of cluster of the clustering result is rearranged using a score indicating the degree of match between the clustering result and a search request for each document and the clustering result with the cluster order thereof rearranged is then output.
9. An information sorting method according to claim 8, wherein the rearranging process of the cluster order comprises a step of calculating the average of scores of the documents contained in each cluster to treat the average of each cluster as a cluster score, and a step of rearranging the cluster order using the cluster scores.
10. An information sorting method according to claim 8, wherein the rearranging process of the cluster order comprises a step of determining the maximum value of the scores of the documents in each cluster to treat the maximum score of each cluster as the cluster score, and a step of rearranging the cluster order using the cluster scores.
11. An information sorting method according to claim 8, wherein the rearranging process of the cluster order comprises a step of determining a score at a midway point or a substantially midway point in each cluster when the documents contained in each cluster are arranged in the order of magnitude of scores assigned thereto, to treat the score at the midway point or the substantially midway point as the cluster score, and a step of rearranging the cluster order using the cluster scores.
12. An information sorting method according to one of claims 9 through 11, wherein the cluster score determining step for rearranging the cluster order is individually performed correspondingly to the plurality of search services when the clustering process is performed correspondingly to the search results provided by the plurality of search services.

13. An information sorting method according to one of claims 8 through 12, wherein the clustering process is performed based on a feature, and wherein the title of each document is detected and a word characteristic of and contained in the title is extracted as the feature.

5 14. An information sorting method according to one of claims 8 through 13, wherein the manner of outputting the clustering result with the cluster order rearranged comprises displaying the clusters in the order of the magnitude of scores from a high score to a low score and wherein when there are clusters having the same cluster score, one of the clusters having a larger number of documents
10 therewithin is positioned higher in the cluster order.

15. An information sorting method according to claim 1, comprising a step of generating a clustering result summary table indicating the summary of the clustering results based on the clustering result, and a step of outputting the clustering result summary table together with the clustering result.

15 16. An information sorting method according to claim 15, wherein the clustering result summary table includes a cluster name of each cluster which is obtained through the clustering process.

20 17. An information sorting method according to claim 16, wherein the clustering result is mutually linked with the clustering result summary table, wherein when a cluster name portion of the clustering result summary table is designated, the corresponding cluster portion of the clustering result is displayed, and wherein when one cluster portion of a clustering result is designated, the clustering result summary table is displayed.

25 18. An information sorting method according to claim 17, wherein when a cluster name portion of the clustering result summary table is designated to display the corresponding cluster portion of the clustering result, the head portion of an outline surrounding the cluster or the last line in the outline of the cluster present immediately prior to the first cluster is displayed on the top of a screen.

19. An information sorting method according to claim 18, wherein when the one cluster portion of the clustering result is designated to display the clustering result summary table, the clustering result summary table is displayed with the head portion thereof appearing first on the screen.

5 20. An information sorting method according to one of claims 16 through 19, wherein the arrangement order of clusters forming the clustering result summary table agrees with the arrangement order of the clusters in the clustering result.

10 21. An information sorting method according to one of claims 16 through 20, wherein when the clustering result summary table is displayed, the manner of displaying the cluster names is changed in the clustering result summary table depending on the importance of each cluster in response to the clustering result.

15 22. An information sorting method according to one of claims 16 through 21, wherein when a plurality of documents to be clustered are the ones which have been searched using a keyword input by a user, the manner of displaying the cluster names containing the keyword input by the user is different in the clustering result summary table from the other cluster names.

23. An information sorting apparatus comprising a clustering module for acquiring a plurality of search results searched by a search service, performing a clustering process on the search results, and outputting the clustering result.

20 24. An information sorting apparatus according to claim 23, further comprising a converter module for converting the search result searched by the search service into a format that is processed by the clustering module.

25 25. An information sorting apparatus according to claim 23, further comprises a cluster order setting module which rearranges the order of cluster of the clustering result using a score indicating the degree of match between the clustering result and a search request for each document and outputs the clustering result with the cluster order thereof rearranged.

26. An information sorting apparatus according to claim 23, further comprises a summary table generator unit for generating a clustering result summary table indicating the summary of the clustering results based on the clustering result, and

5 a display control unit for outputting the clustering result summary table together with the clustering result.

27. A storage medium storing an information sorting software program in which a clustering module performs a clustering process on a plurality of search results that have been searched by a search service in response to a search request of a user, and outputs the clustering result, the information sorting software program
10 comprising:

a step of acquiring the search result from the search service, and

a step of performing the clustering process on the acquired search result and a step of outputting the clustering result.

28. A storage medium storing an information sorting software program according
15 to claim 27, wherein the step of performing the clustering process is performed subsequent to a step of converting the search result searched by the search service into a format that is processed by the clustering module.

29. A storage medium storing an information sorting software program according to claim 27, comprising a step of rearranging the order of cluster of the clustering
20 result using a score indicating the degree of match between the clustering result and a search request for each document and a step of outputting the clustering result with the cluster order thereof rearranged.

30. A storage medium storing an information sorting software program according to claim 27, comprising a step of generating a clustering result summary table
25 indicating the summary of the clustering results based on the clustering result, and

a step of outputting the clustering result summary table together with the clustering result.

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